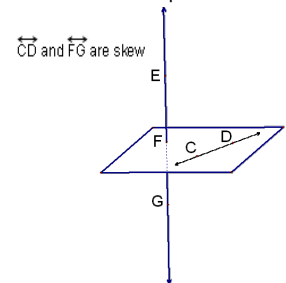
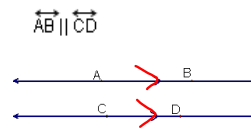


Chapter 3 Parallel and Perpendicular Lines

3-1 Parallel lines and transversals

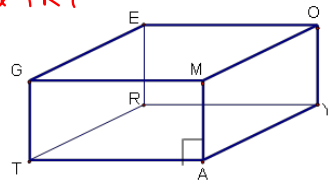
Parallel lines (\parallel) - coplanar lines that do not intersect

Skew lines - lines that do not intersect and are not coplanar



Parallel planes - planes that do not intersect

plane GEO || plane TRY



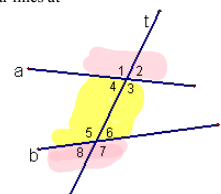
Transversal - a line that intersects 2 or more coplanar lines at different points

interior angles

$\angle 3, \angle 4, \angle 5, \angle 6$

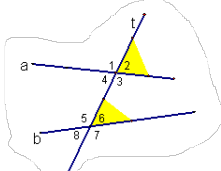
exterior angles

$\angle 1, \angle 2, \angle 7, \angle 8$



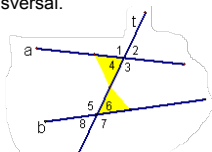
Corresponding Angles-two angles that occupy corresponding positions.

$$\begin{aligned} \angle 2 & \neq \angle 6 \\ \angle 1 & \neq \angle 5 \\ \angle 4 & \neq \angle 8 \\ \angle 3 & \neq \angle 7 \end{aligned}$$



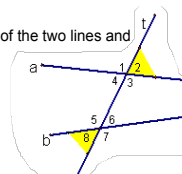
Alternate interior angles-two angles that lie between the two lines and are on opposite sides of the transversal.

$$\begin{aligned} \angle 4 & \neq \angle 6 \\ \angle 3 & \neq \angle 5 \end{aligned}$$



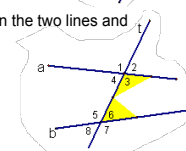
Alternate exterior angles-two angles that are on the outside of the two lines and are on opposite sides of the transversal.

$$\begin{aligned} \angle 2 & \neq \angle 8 \\ \angle 1 & \neq \angle 7 \end{aligned}$$



Same-side interior angles-two angles that lie between the two lines and are on the same side of the transversal.

$$\begin{aligned} \angle 3 & \neq \angle 6 \\ \angle 4 & \neq \angle 5 \end{aligned}$$



HW

p129-130

22-27, 32-47